



PATENT
P56350

IN THE CLAIMS

Please amend claims 1, 4, 12, 16 and 21-23 as follows:

1 1. (Currently Amended) A method of designing a video signal processing
2 integrated circuit (IC), comprising the steps of:
3 incorporating a luminance signal processing block and a color signal processing
4 block having a de-emphasis circuit, ~~wherein~~ into the video signal processing IC;
5 incorporating a circuit element for determining a level of a reproduced video
6 signal of the de-emphasis circuit ~~is incorporated~~ into the video signal processing IC[[,]];
7 and
8 ~~wherein~~ connecting the circuit element ~~is connected~~ to a ground which is used
9 exclusively for the luminance signal processing block.

1 2. (Original) The method according to claim 1, wherein the circuit element
2 comprises an amplifier and a switching element for switching resistors for determining a
3 gain of the amplifier.

1 3. (Original) The method according to claim 2, wherein the switching element
2 comprises at least one Zener diode, and ON/OFF switching of said at least one Zener
3 diode is determined using a Zener breakdown characteristic of said at least one Zener
4 diode.

1 4. (Currently Amended) The method according to claim 1, wherein the circuit
2 element comprises an amplifier, a switching element connected to the ground, and a
3 plurality of resistors connected between the amplifier and the switching element.

1 5. (Original) The method according to claim 4, wherein the switching element
2 selectively switches each of the resistors so that certain resistors are connected to the
3 ground and other resistors are not connected to the ground, thereby determining a gain of
4 the amplifier.

1 6. (Original) The method according to claim 1, wherein a value of the circuit
2 element is determined such that, after inputting a luminance signal and modulating the
3 luminance signal with a frequency deviation of 1 MHz, the level of the reproduced video
4 signal of the de-emphasis circuit is 1 Vpp under a termination condition of 75 Ω .

1 7. (Original) A video signal processing integrated circuit (IC) incorporating a
2 determining circuit for determining a level of a reproduced video signal of a de-emphasis
3 circuit, said determining circuit including a reproduced video level setting unit, wherein
4 the reproduced video level setting unit comprises:

5 an amplification unit for amplifying a demodulated luminance signal output from
6 the de-emphasis circuit;

7 a plurality of resistance elements connected to the amplification unit; and
8 a gain-controlled switching unit connected to the plurality of resistance elements
9 for switching electrical connections of the plurality of resistance elements according to
10 the level of the reproduced video signal, thereby determining a gain of the amplification
11 unit.

1 8. (Original) The video signal processing IC according to claim 7, wherein the
2 gain-controlled switching unit comprises at least one Zener diode, and ON/OFF switching
3 of said at least one Zener diode is determined using a Zener breakdown characteristic of
4 said at least one Zener diode.

1 9. (Original) The video signal processing IC according to claim 7, wherein
2 switching control of the gain-controlled switching unit is determined such that, after
3 inputting a luminance signal, the luminance signal is modulated with a frequency
4 deviation of 1MHz, and the level of the reproduced video signal is 1 Vpp under a
5 termination condition of 75 Ω .

1 10. (Original) The video signal processing IC according to claim 7, wherein
2 said amplification unit comprises a transistor having a base connected to an output of the
3 de-emphasis circuit, an emitter connected to a supply voltage, and a collector connected
4 to said plurality of resistance elements.

1 11. (Original) A method of designing a video signal processing integrated
2 circuit (IC), comprising the steps of:

3 providing said video signal processing IC with a luminance signal processing
4 block having a de-emphasis circuit;

5 incorporating a determining circuit for determining a level of a reproduced video
6 signal of the de-emphasis circuit into the video signal processing IC; and

7 connecting the determining circuit between an output of the de-emphasis circuit
8 and a ground exclusively used for the luminance signal processing block.

1 12. (Currently Amended) The method according to claim [[10]] 11, further
2 comprising providing the determining circuit with an amplifier and a switching element
3 for switching resistors for determining a gain of the amplifier.

1 13. (Original) The method according to claim 12, further comprising forming
2 the switching element with at least one Zener diode, and ON/OFF switching said at least
3 one Zener diode using a Zener breakdown characteristic of said at least one Zener diode.

1 14. (Original) The method according to claim 11, further comprising providing
2 the determining circuit with an amplifier, a switching element connected to ground, and a
3 plurality of resistors connected between the amplifier and the switching element.

1 15. (Original) The method according to claim 14, further comprising operating
2 the switching element by selectively switching each of the resistors so that certain
3 resistors are connected to the ground and other resistors are not connected to the ground,
4 thereby determining a gain of the amplifier.

1 16. (Currently Amended) The method according to claim ~~[[1]]~~ 11, further
2 comprising determining a value of the determining circuit such that, after inputting a
3 luminance signal and modulating the luminance signal with a frequency deviation of
4 1MHz, the level of the reproduced video signal of the de-emphasis circuit is 1Vpp under a
5 termination condition of 75Ω.

1 17. (Original) A video signal processing circuit for determining a level of a
2 reproduced video signal, said circuit comprising:

3 a de-emphasis circuit having an output for providing a demodulated luminance
4 signal; and

5 a video level setting unit connected between the output of the de-emphasis circuit
6 and a ground which is used exclusively for luminance signal processing.

1 18. (Original) The circuit according to claim 17, wherein said video level
2 setting unit comprises:

3 an amplifier connected to the output of said de-emphasis circuit for amplifying the
4 demodulated luminance signal; and
5 a gain control switching unit for determining a gain of the amplifier.

1 19. (Original) The circuit according to claim 18, wherein said gain control
2 switching unit comprises:

3 a plurality of resistors; and
4 a plurality of switches, one for each of said resistors, each of said switches being
5 connected between a respective one of said resistors and the ground for switching
6 electrical connection of selected ones of the plurality of resistors to the ground according
7 to the level of the reproduced video signal, thereby determining the gain of the amplifier.

1 20. (Original) The circuit according to claim 19, wherein each of said plurality
2 of switches comprises a Zener diode, and ON/OFF switching of each Zener diode is
3 determined using a Zener breakdown characteristic of said each Zener diode.

1 21. (Currently Amended) The circuit according to claim 18, wherein said
2 amplifier comprises a transistor having a base connected to an output of the de-emphasis
3 circuit, an emitter connected to a supply voltage, and a collector connected to said ~~gain-~~
4 ~~control~~ gain control switching unit.

1 22. (Currently Amended) The circuit according to claim [[17]] 18, wherein the
2 ~~gain-control~~ gain control switching unit comprises at least one Zener diode, and ON/OFF
3 switching of said at least one Zener diode is determined using a Zener breakdown
4 characteristic of said at least one Zener diode.

1 23. (Currently Amended) The circuit according to claim [[17]] 18, wherein
2 switching control of the ~~gain-control~~ gain control switching unit is determined such that,
3 after inputting a luminance signal, the luminance signal is modulated with a frequency
4 deviation of 1MHz, and the level of the reproduced video signal is 1Vpp under a
5 termination condition of 75Ω.